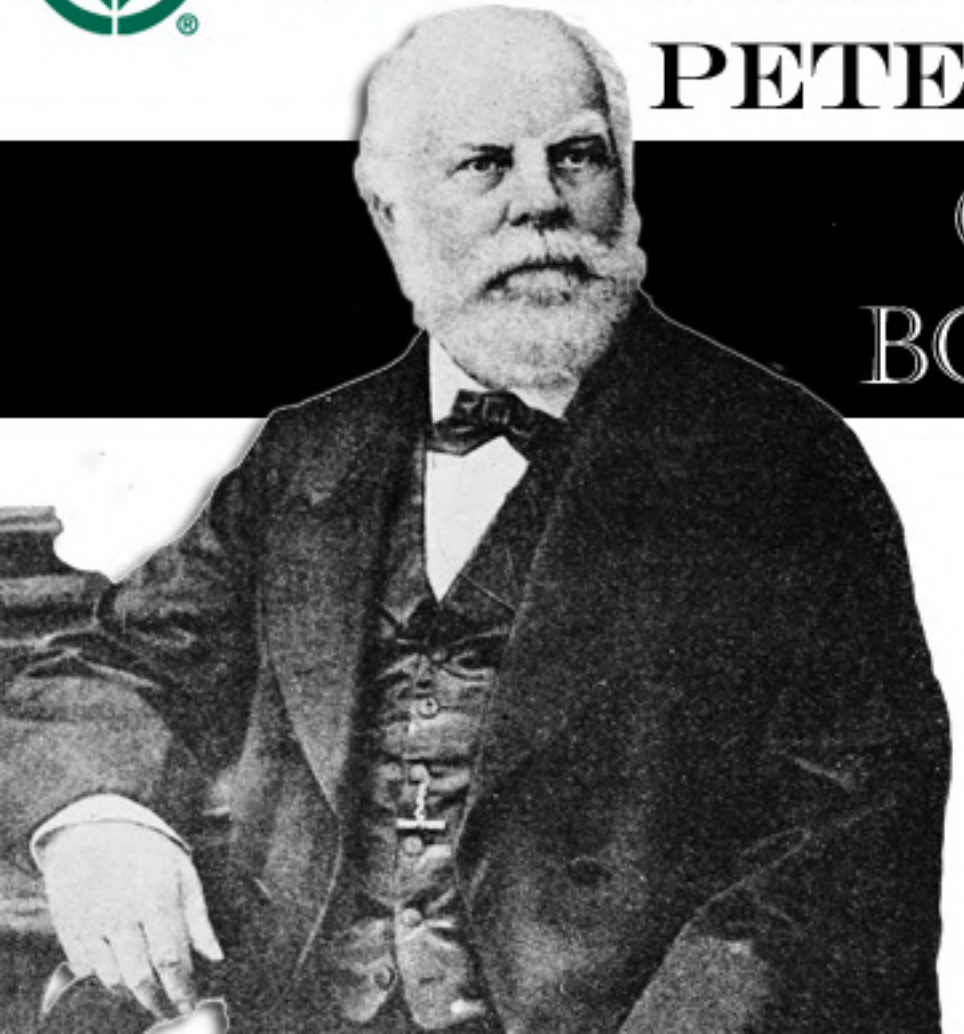
Missouri Botanical Garden

Peter H. Raven Library

George Engelmann Botanical Notebooks



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

Hurd Dyck 1857

Kinkaid 397-9

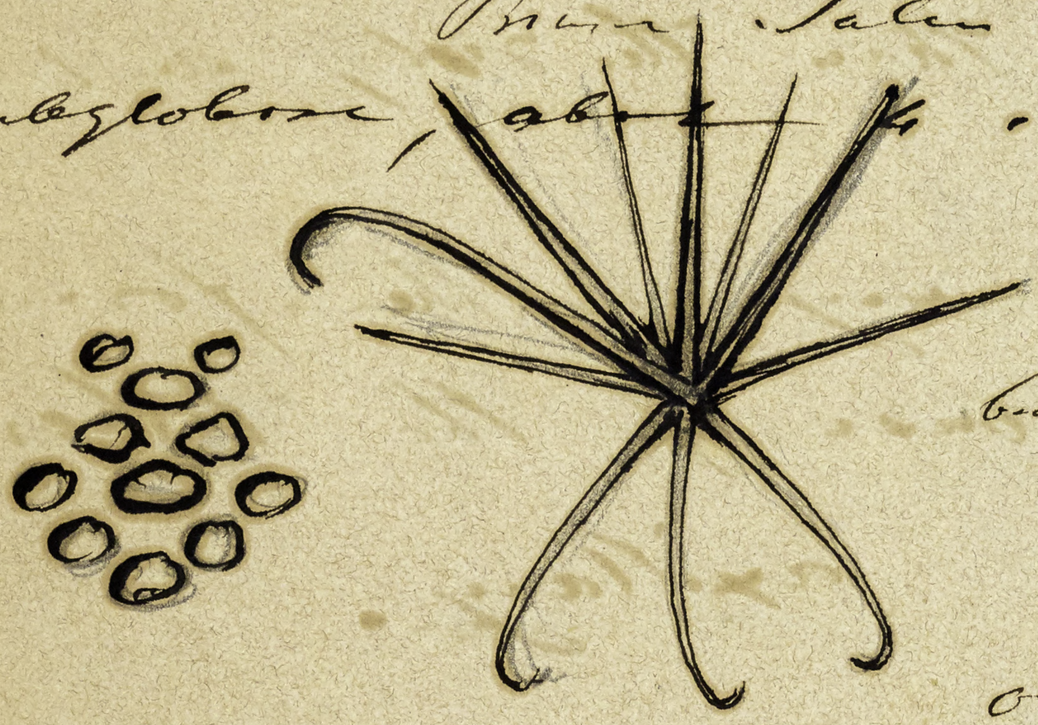
1478

Echinocactus unicinatus ex Cole

Brewster Co. Tex. — dried dead spec.

subglobose, about 4 inches high

4 central spines, stouter but scarcely longer than the radial spines; angular upper and lower one flattened, lower one hooked downward, a little longer than the other spines;



radial spines 7; 3 lower ones hooked 2 lateral ones straight or very slightly bent or curved, ~~2 opposite ones~~ on the sides of the hooked central spine; 2 upper radial spines weaker, above the upper central spine.

Seems similar to Poselger's specimen but apparently distinct from my variety with long hooked spines from El Paso.

It may be considered also with 8 radial spines 1, central hooked one and 2 additional upper radial ones

The exterior spines are 9–12 lines long;
the interior ones 12–15 lines long, the hooked
one (a little) longer than the rest, about
(2 or 3 lines)

Groove as in my northern form
extending to the base of the tubercle,
glandless areola axillary.

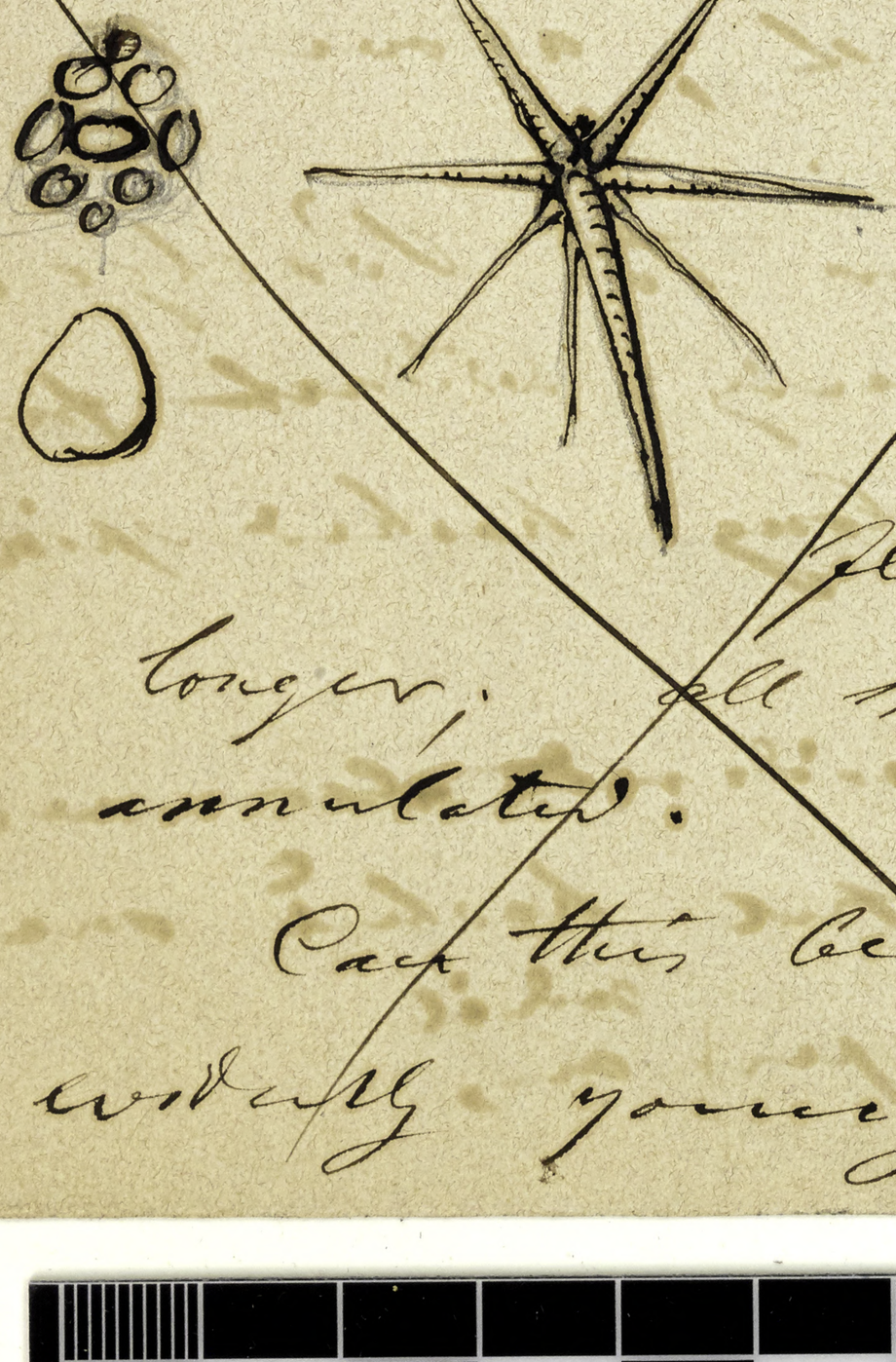
MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

= E. viridescens

Echinocactus Californicus Hort Dyck

globose plants of 3 or 4 inches diameter
with — — ribs; areola oval,
spines radial 7, 4 upper
& lateral one stouter
all the 3 lower ones
weaker, shorter; central
1 per slightly reuniform
flattened, stouter a little
longer; all spines more or less
annulated. Spines 7 or 8 — 10–12
lines long

Can this be my Echinocactus Emoryi?
evidently young, incomplete plant



0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

E. umbellatus, living spec. — nearly 1 foot high, 6–8 inch diameter; coll. south of Sabbille to Catorze.

1479

ed. H. Bodger. Berlin 1857

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Echinomastus valforniæ

yg pl 2" diam. 8 tubercled
ribs

central sp
slightly hooked
and hooked all ages

Mr. Schlesinger

upp sp a little long the lower a
certain G no milk !

1480

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

~~Ursinia~~ ~~wilsonii~~ ~~Benth~~ Benoam

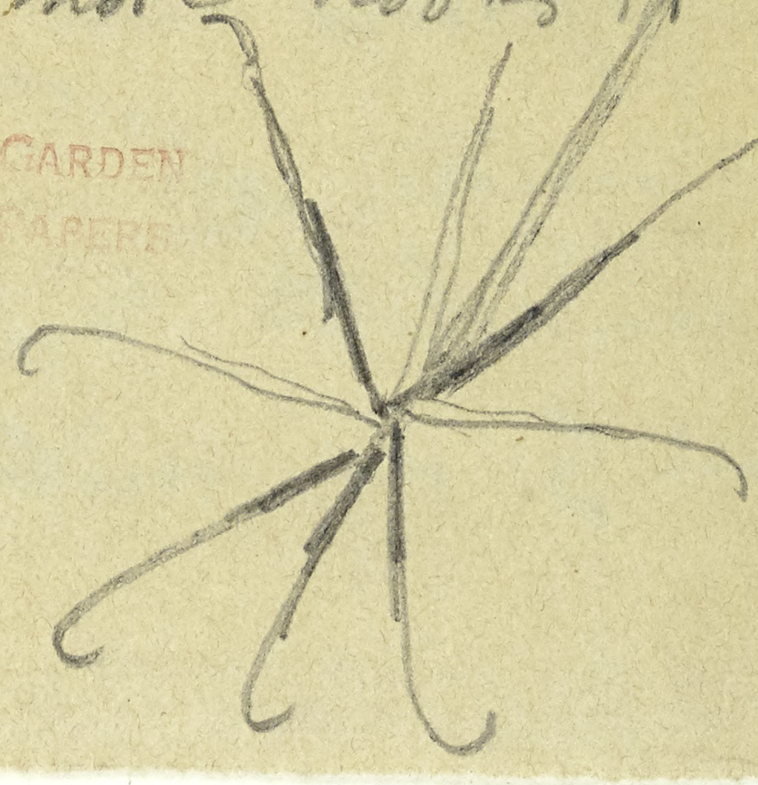
Wilsonii Benoam

Wien 1958

Ech "unguiospinus" beautiful

" Leucoinatus ♯ soft

5 or more hooks ♯

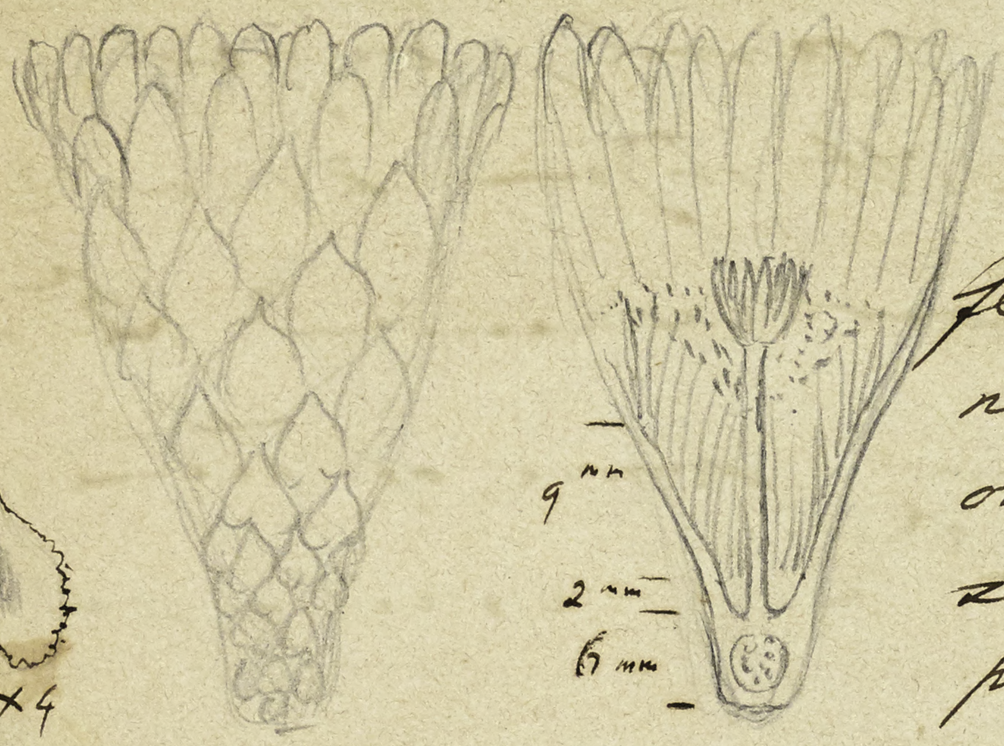


MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Echinoracter uncinatus Hort Pers ex Hoff. Paris March 10 1869

1481



flower 18–20 lines long not opening more than about one inch. sepals in 3/21 series — 5th & 6th pairs most prominent

ovary about 6 mm long, globose densely covered with about 21 triangle scales, green and fleshy in centre with broad scarious margin which is protracted into large rounded subulate auricles

about same number of exterior corona sepals of tube of same form, only centre becoming brown, deep brown, margin narrow and auricles shorter

same number of inner and upper sepals — oblong linear short-mucronate, denticulate at rounded apex — paler but scarcely scarious at margin

18 petals in the specimen examined. oblong linear, rounded at apex, denticulate longer than sepals and much longer than stamens

Tube inside with short (2 mm) nectarian cavity below the insertion of stamens staminal part 9 mm long. stamens much shorter than petals purplish at base

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

style pale brownish or dirty red, same colour as stigmas, scarcely longer than stamens; style with stigma 21 or 22 mm

stigmas in the flower examined 5 mm long 14 in number some of them connate to the middle; erect-patulous.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Hort Dyck 1857

1482

Echi polyrhaphis = E. villosus, a hybegonous Cactus; bristly spines much more densely covered with them than my Echinodesyacanthus

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Dec. 1872 1483

Published 401-7

Echinocactus viridescens Nutt in Torr & Gr Fl. N. Am. 1840 Vol 1. p. 554.

Eng Syn. p. 19 Bot Mex Bound Cact. 24 t. 29.

collected near San Diego, Nuttall's original locality by L. Lyons, Hassler Expedition 1872.

Three specimens before me are all flat, depressed globose

1, smallest 4 inches diameter, 1 3/4 inches high 13 ribs

tomentose spineless areola depressed in center 1/4 inch diameter.

Specimen single.

2. medium 5 inches diam. 2 or 2 1/2 inches high. 13 ribs

tomentose areola depressed 1/4 inch diameter.

4 buds from 1/2 - 1 inch diameter at lower, widest

part of trunk.

3. largest specimen 6 inches diam. nearly 3 inches high.

14 ribs, 4 others beginning by branching from the upper part

tomentose areola 1/3 inch.

4 buds 1 - 2 3/4 inch diameter near lower rim

the largest buds depressed, already with 13 ribs

but no spineless area in depressed center.

Ribs obtuse, tuberculated; tubercle oblong areola

on top of tubercle 5-6 lines long 3/8-1/2 l. wide.

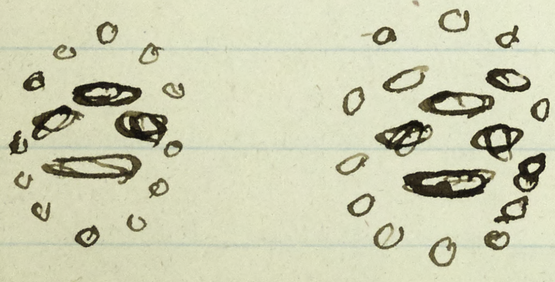
12 radial spines straight & short 4-6 rarely to 9 l. long, often

somewhat flattened.

4 central spines 1-1 1/2 rarely 1 3/4 inch long, flat, broad,

ribbed, annulate, lowest boarded, latent any slender,

oft two additional upper central spines



with red tinge

Berry green smooth subglobose

about 9 lines in either diam

fleshy but seed loose and dry inside and falling out

through the basal opening cell formed in detaching from the

plant; therefore no pulp inside but viid or pulverulent

fleshy, covered with about 20 - 24 uniform violate

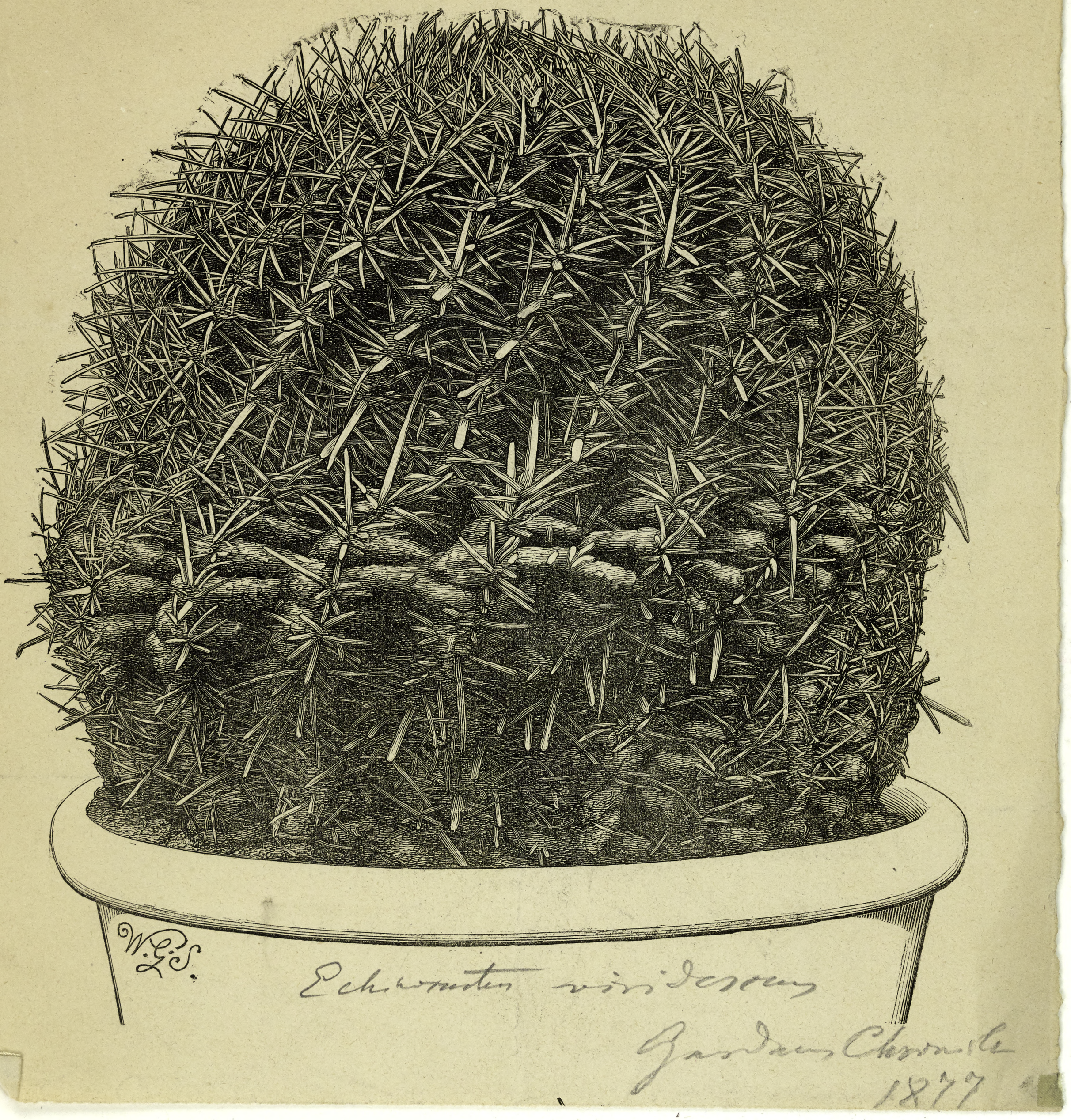
sepaline scales in 5/13 order, crowned by the remnant

of the flowers

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

1484



W. E. S.

Echinocactus visnaga

Gardeners Chronicle

1877

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Cactaceae at Hasselof's

Berlin Jun 5 [illegible]

Echinocactus Californicus, kommt, für Bezeichnung, auf Treue
von Seneca – als [illegible] Pflanze ist [illegible], 4 [illegible]
Rippen, [illegible] mit 8 Dornen, mit einem [illegible]
aufstehen über 13. [illegible] Rippen; die Mittel
[illegible] Stk, alle gerungelt; 8 radial [illegible],
2 Centr, [illegible].

Magnum mist E. viridescens ?

1485

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Echinocactus Californicus Hort Dyck 1857

globose plant 3–4 inches in diam; ribs ?

areola oval — spines radial 7, 4 upper and

lateral ones stouter; the 3 lower ones weaker short

central spine slightly recurved, flattened, stouter,

a little longer; all spines more or less annulated

Spines 7 or 8 — 10 or 12 lines long

1486

Can this be any E. Emoryi? evidently

young, incomplete plants

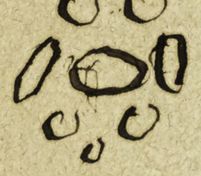
on the upper end of the areola is a

short knob, an incomplete spine?

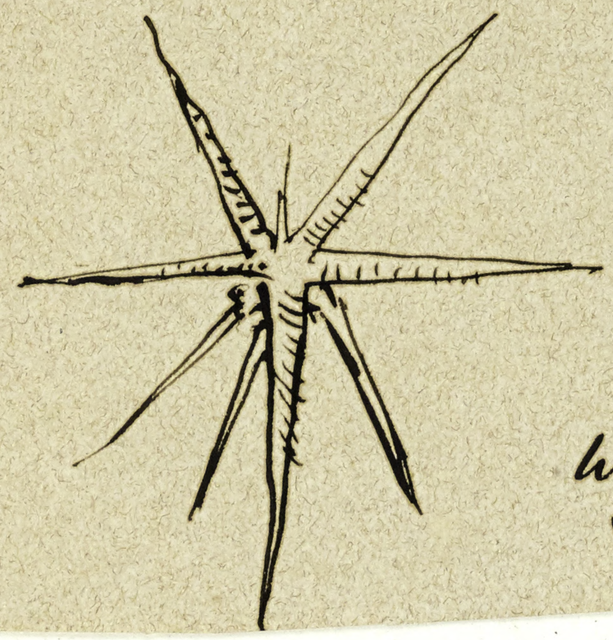
or the scar organ, which is found in

many Echinocacti between the floriferous

and aculeiferous areola.



form of areola



Why not viridescens?

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

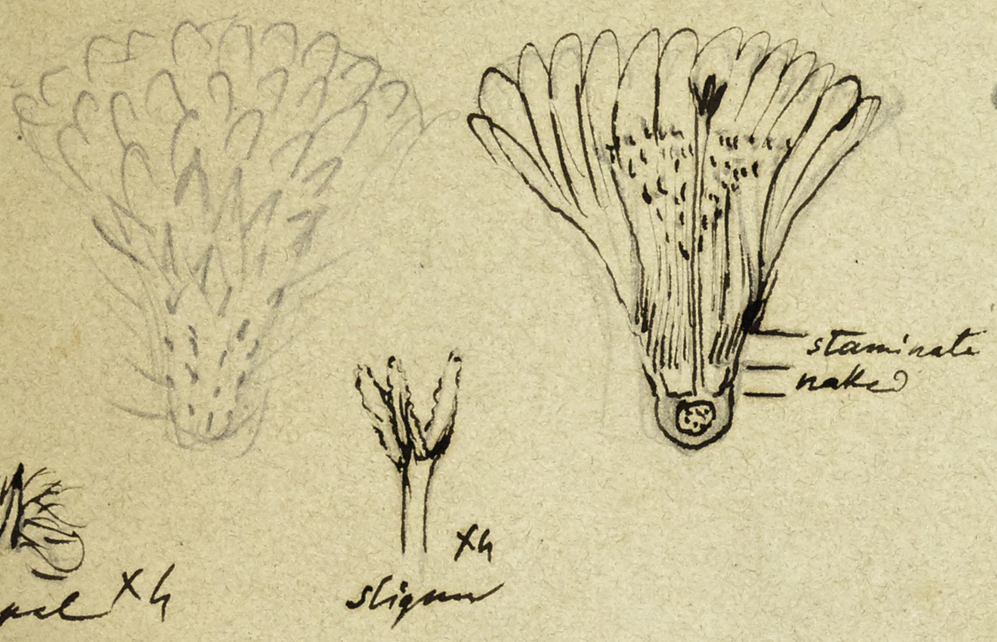
MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

Echinocactus villosus Lem, Labourt p. 239

Echinocactus polyacanthus Pfeif = Selenicereus
— — villosus Lemaire Hort Berendorff

Paris March 10 1868

Lima, Peru



flowers numerous near the top of the plant or a little distance (inches) from the vertex forming a

flowers abt 1 inch long 3/4 wide

Ovary green, with 10-12 small (1/2-1 mm long) reddish green labular-subulate scales in 8/21 arrangement bearing in their axils one or two long (2-6") white bristly hair and florose white wool

tube of flowers short, widening rapidly, with 18-20 labular-subulate sepals similar to those of ovary, but gradually larger, bearing same axillary productions

15-18 inner sepals, roseolous, more petaloid without axillary wool linear to oblong linear, somewhat acute, upper ones obtusish;

15-18 petals, a little longer, oblong-linear, obtuse denticulate or erose, sometimes with a very short herbaceous mucro — roseolous.

Naked nectarian cavity at base of tube 3/4 line (1 1/2 mm) long very distinct

stamens part not more than 1 line (2 mm) long; stamens yellowish white, anthers very small abt 0.8 mm long,

style as long as stamens, same color stigmata petaloids - erect, 4-5 (3-4") 3/4 line long

1487

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

ISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Echinocactus viridescens ?

July 15 1871

seeding received ~ Washington 1858 sent to Kew from Cal[ifornia] seeds raised by Mr Roetter, did this season.

1489

Head globose, 2/2 inches high, 2/4 in diameter

13 Tuberculated ribs

4 central spines with indications of annular marks, about 7 lines long, lower one hooked, upper others recurved,

12 radial spines, all somewhat recurved; upper & lowest smallest, lower lateral ones largest 4-5 lines long

Plant as yet undeveloped.

Deutsche Apotheke.

HENRY DIERS,

APOTHECARY,

South East Corner Fifth and Biddle Streets,

ST. LOUIS. MO,

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

cm 0 1 2 3 4 5 6 7 8 9 10
Copyright reserved
MISSOURI BOTANICAL GARDEN

Echinocereus viridiflorus Nutt

Dec 6 1872

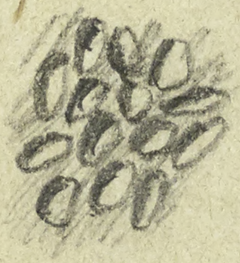
San Diego, Agassiz

fleshy
greenish red

basal opening

x 8

surface
of seed
x 60



1490

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

R. C. HARRISON,

508 Leffingwell Avenue,

Druggist & Apothecary

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

G. F. ENGLEMAN, M.D.,

3003 LOCUST STREET.

cm 0 1 2 3 4 5 6 7 8 9 10
copyright reserved
MISSOURI BOTANICAL GARDEN

Newberry Cact Sons Exp. 1858 (Jan 1859) (= 5/13 arrangement)

1491

Echinocactus viridescens Dr Newberry 1858 San Diego
"fruit yellow" scales on fruit 25-30 seeds
3,8 l. long. flower persistent —.
Seed as described Bowlby Rep. pag 24 and figured
pl. 29: fig 6. but the pili in fig c pare too far
distant from one another
Cactuses seen for the first time. It is allied to
roly Codes hooked or rather curved in a right
angle, acutish. cuby resembles that of
E. Wislizeni pl 25. fig 4. e.

see Cartons of Sons' Expedt for Citations

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

Newberry's Cactus (1858) *Echinocactus Whipplei* Engl. Jan 1859

408-414

1492

the broad white upper central spine appears first in the young bunch, next the two lateral central spines, then the lateral radials, the lower radials, and at last the two upper radial spines

13 ribs, compressed, tuberculate, interrupted, floriferous areola contiguous to the superiors areolæ and forming a groove, at first deep towards the tubercles or almost to its base.

flower yellowish brownish externally

" Sandy soil on Little Colorado, splendid, 3-4 inches diameter half buried in Sand; ribs 13 plaques sperons obliques. May 18th

flower according to Dr Newberry's notes; externally greenish yellow, with greenish red; the middle of each sepal striped with brown red, anthers yellow; stigma green.

floribus versus apicem congestis, virescenti flavidis pollicaribus; ovario sepalis squamiformibus 2-5 ordinatis s. uniformibus munito, sepalis tubi 10-15 obtusis, interioribus ovatis superioribus oblongis obtusis; petalis sub 8 oblongis mucronatis; infimo tubi parte nuda, filamentis tenuissimis numerosis, stylo longiore, versum apicem clavato apice infundibuliformi in stigmata 5 brevia erecta s. convoluta divisa.

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS

0 1 2 3 4 5 6 7 8 9 10
cm
copyright reserved
MISSOURI BOTANICAL GARDEN

3. E Wheeler & Polygamists

A Engelm, Surgn Expd 1858-59

E. pubispinus Engelm small oval, with 13 compressed sinuate ribs
bristle like
6-10 extensive spines, of which the uppermost 1 or 2 are longer & soft
hooked or curved; central spine (with or without a stouter hooked) ; spines usually
pubescent
Found in Pleasant Valley near Salt Lake Desert without flower
or fruit, apparently allied to the last species. Only 2 inches high,
Spines 1-4 lines long, central 5-6 lines the purest. All usually
densely pubescent.

1493

MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS